



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

NM11/0507

JAMES L. NAPOLI
MARSHALL, OTOOLE, GERSTEIN, MURRAY &
BORUN, 6300 SEARS TOWER,
233 SOUTH WACKER DRIVE
CHICAGO IL 60606-6402

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/669,389	07/16/96	015	NGO, T	1611 05/07/98

First Named Applicant: DAUGAN, ALAIN C. R.

TITLE OF INVENTION: TETRACYCLIC DERIVATIVES, PROCESS OF PREPARATION AND USE

ATTYS DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 REF/1233CV	514-249.000	083	UTILITY	NO	\$1320.00	08/07/98

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay FEE DUE shown above, or

B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

I. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

II. All communications regarding this application must give application number and batch number.

Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

8/669,389

7/16/96

DAUGAN

REF/1233CV

APPLICATION NUMBER FILING DATE FIRST NAMED APPLICANT ATTORNEY DOCKET NO.

08/669,389 07/16/96 DAUGAN

A REF/1233CV

NM11/0507

JAMES J. NAPOLI
MARSHALL, OTOOLE, GERSTEIN, MURRAY &
BORUN, 6300 SEARS TOWER,
233 SOUTH WACKER DRIVE
CHICAGO IL 60606-6402

EXAMINER

NGO, T.

ART UNIT

PAPER NUMBER

1611

14

1611

DATE MAILED:

05/07/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

NOTICE OF ALLOWABILITY

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☐ This communication is responsive to _____.

☒ The allowed claim(s) is/are 1-10, 13-17.

☐ The drawings filed on _____ are acceptable.

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☐ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. _____.

☐ including changes required by the proposed drawing correction filed on _____, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Notice of Draftperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☐ Interview Summary, PTO-413

☐ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☒ Examiner's Statement of Reasons for Allowance

Mukund J. Shah

MUKUND J. SHAH
SUPERVISORY PATENT EXAMINER
GROUP 1/00

1-800-417-3811

Art Unit: 1611

Allowable Subject Matter

Applicant's amendment filed on 2-9-98 has overcome the previous 112 rejection. Non-elected subject matters have been canceled, and with no other rejections the application is in condition for allowance.

Accordingly, claims 1 - 10 and 13 - 17 are allowed.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The claimed invention directs to tricyclic and tetracyclic compounds of Formula (I) and (II) wherein an aromatic ring or ring system bonds to the sixth position of tetracycle of Formula (I), or bonds to the second position of the tricycle of Formula (II). The invention also directs to a process of making Formula (I) by reacting Formula (II) with a primary amine followed by an interconversion step and/or salt formation; or solvate formation. The closest prior art, GB 1,454,171 (or GB'171 from here on), discloses **octahydrohydro-pyrazino[1',2':1,6]pyrido[3,4]indoles-1,4-dione** wherein the substituent at the sixth position is either hydrogen or lower alkyl, **not a ring or ring system** as in the instant claims. The process disclosed by GB'171 appears similar; however, at a closer look the claimed Formula (II) is not the same as Formula (V) of GB'171 since the claimed R² differs from the disclosed R¹. Since the claimed Formula (II)


Art Unit: 1611


is not commercially available, the process of GB'171 cannot render obvious the claimed process. No other prior arts can be combined with GB'171 to teach or fairly suggest the claimed Formulae (I) and (II) and the process of making Formula (I).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Tamthom (or Tam) Ngo whose telephone number is (703) 305 - 4485. The examiner can normally be reached on Monday thru Friday from 9:00 am to 5:30 pm EST.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 1235.


T. Ngo / 5-5-98


Mukund J. Shah
Supervisory Patent Examiner
Art Unit 1611